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TWO NEW RICE RATS (GENUS ORYZOMYS) FROM FLORIDA

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Among a series of small mammals collected in Lee County, Florida during the late winter and early spring of 1954, 26 *Oryzomys* were taken on Pine and Sanibel Island. The specimens from both of these islands are markedly distinct, both in color, in size and skull characters, from *Oryzomys palustris natator* and *Oryzomys palustris coloratus* and may be considered subspecifically distinct.

Oryzomys palustris planirostris, new subspecies

Type.—Adult female, skin and skull, number 8090, Cornell University Mammal Collection, collected one mile west of third bridge that spans Matachla Pass, Pine Island, Lee County, Florida, by W. J. Hamilton, Jr., March 11, 1954; original number 4344. The type has the following measurements: Total length, 240; tail vertebrae, 122; hind foot, 32; weight 50.5 grams. Skull: condylobasal length, 30.0; zygomatic breadth, 15.5; eranial breadth, 13.7; nasals, 12.0; interorbital breadth, 5.8; anterior palatine foramen, 6.7; palatal bridge, 6.0; upper molar series, 4.7.

Range.-Known only from Pine Island and an area two miles north of Fort Myers, Florida.

Diagnosis.—Size small (Table 1). Winter pelage, upperparts brownish gray, top of head and mid-dorsum darker with slightly buffy suffusion on sides and flanks, the buff color scarcely marked in some individuals; underparts dull white; feet white, tail dark gray above, whitish below. Color similar to Georgia and Virginia specimens of *O. p. palustris*, but with a browner caste. Skull small and weak, the supraorbital and temporal ridges much less pronounced than in *natator* or *coloratus;* rostrum relatively short and broad; anterior dorsal profile of skull straight, the nasals and frontals aligned, contrasting to the convex profile of *natator* and *coloratus*.

Comparisons.—Oryzomys palustris planirostris most nearly approximates in color and size Oryzomys p. palustris. It differs from both natator and coloratus in smaller size, lack of tawny coloration and the smaller and weaker skull characters.

Remarks.—Twelve specimens were collected in a garbage dump and adjoining wet land (about five feet above tide level, at the type locality). In company with *Sigmodon hispidus insullicola*, these animals were utilizing the cover formed by tin cans, cardboard cartons and other detritus. Traps placed in well marked runways took both species, as did those set in dense stands of *Spartina patens* well removed from the

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	11 skins and skulls	O. p. coloratus		10 skins and skulls	O. p. natator		11 skins and skulls	O. p. sanibeli	12 skulls	14 skins and	0. p. planirostris		Average and extreme
Min	Max.	Ave.	Min.	Max.	Ave.	Min.	Max.	Ave.	Min.	Max.	Ave.		measurements
250.0	326.0	283.0	246.0	318.0	281.2	233.0	274.0	257.5	226.0	266.0	247.5	Total length	in 1
123.0	171.0	143.5	122.0	173.0	140.6	111.0	138.0	123.6	108.0	128.0	119.6	Tail vertebrae	nillimeters
31.0	38.0	33.4	28.0	37.0	33.1	28.0	33.0	31.0	29.0	33.0	31.0	Hind foot	of rice
30.6	34.8	32.7	30.0	34.8	32.9	29.4	32.5	31.4	27.4	30.8	29.3	Condylobasal length	rats, (
15.39	19.0	17.1	16.0	18.8	17.2	15.2	17.4	16.1	15.1	16.5	15.8	Zygomatic breadth	ryzomys
13.0	14.5	13.8	13.2	14.0	13.6	13.0	13.8	13.4	12.7	14.4	13.4	Cranial breadth	palustris
11.2	14.0	12.4	11.3	14.0	12.8	10.6	13.0	11.7	10.0	12.0	11.2	Nasals	s, from
ยา.4	6.3	5.7	5.0	6.2	5.8	5.1	5.8	5.4	5.1	5.9	5.5	Interorbital breadth	Florida
6,3	8.0	7.2	6.6	7.8	7.2	6.8	7.4	7.0	5.8	7.0	6.4	Anterior palatal foramen	
ा :%	7.0	6.2	0.5	6.6	6.1	5.5	6.3	5.9	0.3	6,0	5.8 8	Palatal bridge	
4.6	7.0	5.2	5.0	5.3	5.1	4.0	5.0	4.9	4.5	4.9	4.8	Upper molar series	

dump. The rice rats were feeding on the stems of Spartina, a dropseed grass, Sporobolus virginicus and the succulent stems of Sesuvium portulacastram. This series was taken on March 2, 3 and 11, 1954. None of the females were gravid or nursing, although one individual had enlarged and turgid uterine horns. The males had enlarged and descended testes, these measuring 9×5 to 13×7 mm. respectively. All the Pine Island specimens were taken at the type locality. Trapping in the environs of Bokeelia and St. James City produced cotton rats but no rice rats. A large male taken on March 20, 1954, two miles north of Fort Myers in a drainage ditch does not differ from those collected on Pine Island.

Florida Specimens Examined.—Oryzomys palustris planirostris: Pine Island, 13; two miles north of Fort Myers, 1. Oryzomys palustris natator: Lake Harney, 5; Chassahowitska River, 1; Ocala National Forest, 1; Crescent Lake, 1; Geneva, 1; Lake Kissimmee, 1. Oryzomys palustris coloratus: Cape Sable (topotypes) 9; Eden, 1; 15 miles northwest of Miami, 1.

Oryzomys palustris sanibeli, new subspecies

Type.—Adult male, skin and skull, number 8192, Cornell University Mammal Collection, collected in freshwater marsh, four miles west of lighthouse on Sanibel Island, Lee County, Florida, by W. J. Hamilton, Jr., April 1, 1954; original number 4446. The type has the following measurements: total length, 263; tail, 125; hind foot, 33; weight, 71 grams. Skull: condylobasal length, 31.9; zygomatic breadth, 16.7; cranial breadth, 13.8; nasals, 11.8; interorbital breadth, 5.4; anterior palatine foramen, 6.8; palatal bridge, 5.9; upper molar series, 4.9.

Range .- Known only from Sanibel Island.

Diagnosis.—Size small (Table 1). Winter pelage, upperparts between amber brown and argus brown of Ridgway, the brownish color most pronounced on mid-dorsum. Dorsum of summer pelage similar to Oryzomys palustris planirostris, but with less gray. Underparts similar to *planirostris*. Skull like *planirostris* but larger, the nasals relatively longer; palatal foramen borders longer and less flaring than in *planirostris*. This insular race differs from *planirostris* primarily in the bright brown winter pelage.

Comparisons.—The Sanibel Island specimens are similar in winter pelage to Oryzomys palustris natator and Oryzomys palustris coloratus, chief difference being in the brighter dorsal pelage and the markedly smaller size, both in body measurements and skull. From winter specimens of *planirostris*, sanibeli may be at once recognized by the brown pelage, which contrasts with the general gray tone of the former.

Remarks.—The rice rats on Sanibel Island appear to be concentrated in the fresh water swamps provided by artesian wells; single specimens were taken in a swale behind the only school house on the island and in a cattail stand adjoining the south beach road. In the swamp area where specimens were collected, the dominant vegetation consists of cattails. All specimens were trapped near the water's edge; on the drier ground the cotton rat, *Sigmodon hispidus insullicola* was abundant. In this area, the two animals do not appear to cross the local ranges of each other. A noticeable stickiness was noted on the plantar surface

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of the hind foot in all Oryzomys collected on Sanibel Island, in contrast to fresh specimens I have handled elsewhere. Goldman (N. A. Fauna 43, 1918) states that the new coat of Oryzomys seems to replace the old almost imperceptibly, but that adults in apparently fresh and in obviously worn pelages may often be seen together. The rice rats from Sanibel are in several stages of molt, the line of demarcation and the pronounced color difference in winter and summer pelage being well marked. Molt commences on the head and proceeds caudad. This pelage change demonstrates the marked seasonal color variation and the lack of such in other races of palustris from southeastern United States.

A collection of 300 barn owl pellets from a former boat loading shed in Tarpon Bay, Sanibel Island, produced many Sigmodon skulls and bones, but not a single Oryzomys. This may indicate the restricted or spotty distribution of rice rats on Sanibel.

Specimens Examined.—Same as for planirostris.

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